

What is claimed:

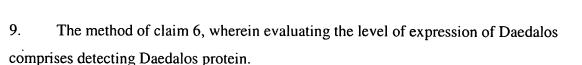
- A method of identifying a neural progenitor cell, comprising:
 providing a sample of cells or tissue; and
 evaluating the level of expression of Daedalos in a cell of the sample,
 wherein if the cell has a higher level of expression of Daedalos as compared to a
 control, it is identified as a neural progenitor cell.
- 2. The method of claim 1, wherein evaluating the level of expression of Daedalos comprises detecting Daedalos mRNA.
 - 3. The method of claim 1, wherein evaluating the level of expression of Daedalos comprises detecting Daedalos protein.
 - 4. The method of claim 1, wherein the sample of cells or tissue contains neural progenitor cells and non-neural progenitor cells.
 - 5. The method of claim 1, wherein the sample is neural cells or tissue.
 - 6. A method of identifying the stage of neurogenesis of a cell, comprising: evaluating the level of expression of Daedalos in the cell, wherein if the cell has a higher level of expression of Daedalos as compared to a control, it is identified as a neural progenitor cell and if the cell has a lower level of expression of Daedalos as compared to a control, it is identified as a differentiated cell.
 - 7. The method of claim 6, further comprising the step of isolating a first cell, based upon its stage of neurogenesis, from a second cell characterized by a different stage of neurogenesis.
- 30 8. The method of claim 6, wherein evaluating the level of expression of Daedalos comprises detecting Daedalos mRNA.

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- 5 10. A method of modulating cell differentiation, comprising:

 providing a cell; and

 modulating expression, levels or activity of Daedalos in the cell, to thereby

 modulate differentiation of the cell.
- 11. The method of claim 10, wherein the cell is maintained in a non-differentiated state or differentiation is inhibited, comprising administering to a cell an agent that increases Daedalos activity, levels or expression.
 - 12. The method of claim 11, wherein the agent is selected from the group consisting of: a Daedalos polypeptide or functional fragment or analog thereof; a nucleic acid encoding a Daedalos polypeptide or functional fragment or analog thereof; a nucleic acid that increases expression of the endogenous Daedalos gene of the cell; and a small molecule that increases expression of the endogenous Daedalos gene of the cell.
 - 13. The method of claim 11, wherein the cell is a neural progenitor cell or neural stem cell.
 - 14. The method of claim 11, wherein Daedalos expression, levels or activity is increased in the presence of neural growth factor.
 - 15. The method of claim 11, wherein the agent is administered in vivo.
 - 16. The method of claim 11, wherein the agent is administered in vitro.
- The method of claim 10, wherein differentiation of the cell is promoted, comprising administering to a cell an agent that decreases Daedalos activity, levels or expression.



- 18. The method of claim 17, wherein the agent is selected from the group consisting of: a Daedalos binding protein that inhibits a Daedalos activity; an antibody to Daedalos that inhibits a Daedalos activity; a mutated Daedalos or fragment thereof that inhibits a Daedalos activity; a Daedalos nucleic acid molecule that inhibits expression of Daedalos; and a small molecule that inhibits transcription or activity of Daedalos.
- 19. The method of claim 17, wherein the cell is a neural progenitor cell or neural stem cell.
- 20. The method of claim 17, wherein Daedalos expression, levels or activity is decreased in the presence of neural growth factor.
- 21. The method of claim 17, wherein the agent is administered in vivo.
- 22. The method of claim 17, wherein the agent is administered in vitro.
- 23. A method of determining if a subject is at risk for a neural cell related disorder, comprising evaluating the level of expression, protein or activity of Daedalos in a cell of the subject, wherein an aberrant level of Daedalos expression, protein or activity compared to a control is indicative of risk for a neural cell related disorder.
- 24. The method of claim 23, wherein the cell of the subject is derived from neural tissue.
- 25. The method of claim 23, wherein the cell exhibits an increased level of Daedalos expression, protein or activity compared to a control.
 - 26. The method of claim 25, wherein the neural cell related disorder is a proliferative disorder.

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- 27. A method of obtaining a population of neural cells, comprising: providing a neural progenitor cell;
- inhibiting the expression, levels or activity of Daedalos in the neural progenitor cell; and
- allowing the neural progenitor cell to divide, to thereby obtain a population of neural cells.
- 28. The method of claim 27, wherein the expression, levels or activity of Daedalos is inhibited by contacting the cell with a compound selected from the group consisting of: a Daedalos binding protein that inhibits a Daedalos activity; an antibody to Daedalos that inhibits a Daedalos activity; a mutated Daedalos or fragment thereof that inhibits a Daedalos activity; a Daedalos nucleic acid molecule that inhibits expression of Daedalos; and a small molecule that inhibits transcription or activity of Daedalos.
- 29. A method of treating a neural cell related disorder in a subject, comprising: providing a subject having a neural cell related disorder; and modulating expression, levels or activity of Daedalos in a cell of the subject, to thereby treat the disorder.
- 30. The method of claim 29, wherein expression, levels or activity of Daedalos is inhibited.
- 31. The method of claim 30, wherein the expression, levels or activity of Daedalos is inhibited by administering to the subject an agent selected from the group consisting of: a Daedalos binding protein that inhibits a Daedalos activity; an antibody to Daedalos that inhibits a Daedalos activity; a mutated Daedalos or fragment thereof that inhibits a Daedalos activity; a Daedalos nucleic acid molecule that inhibits expression of Daedalos; and a small molecule that inhibits transcription or activity of Daedalos.
- 32. The method of claim 30, wherein the disorder is cancer.

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- 33. The method of claim 29, wherein expression, levels or activity of Daedalos is increased.
- 34. The method of claim 33, wherein the agent is selected from the group consisting of:

 a Daedalos polypeptide or functional fragment or analog thereof; a nucleic acid encoding a
 Daedalos polypeptide or functional fragment or analog thereof; a nucleic acid that increases
 expression of the endogenous Daedalos gene of the cell; and a small molecule that increases
 expression of the endogenous Daedalos gene of the cell.